



## Gulf of Mexico Harmful Algal Bloom Bulletin

18 August 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: August 15, 2005

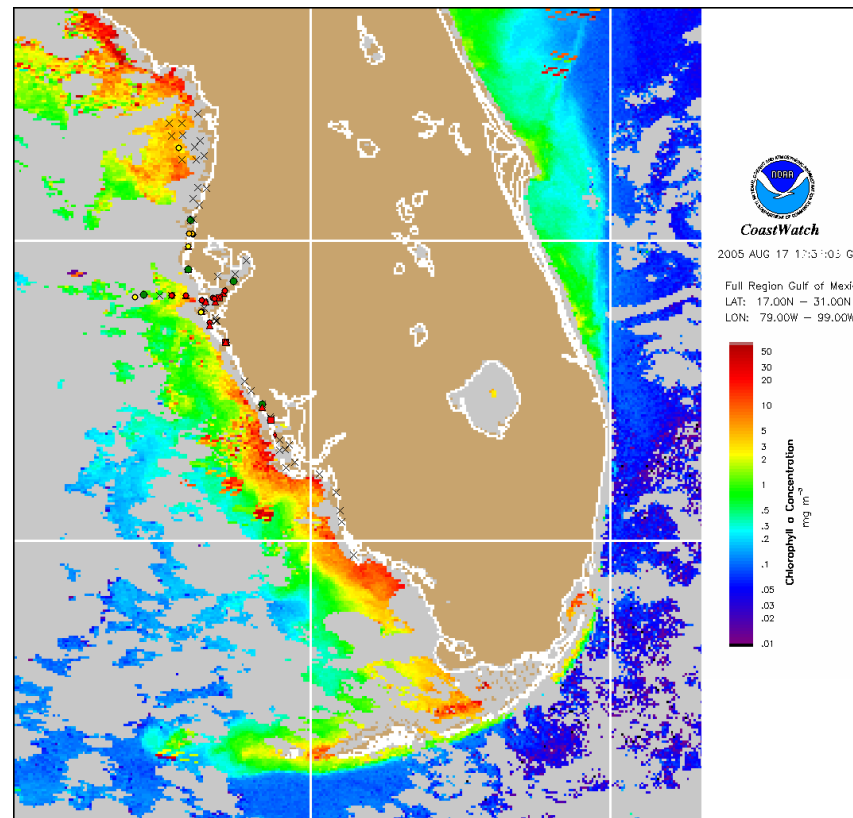
**Conditions:** A harmful algal bloom has been identified from northern Pinellas to northern Lee County. Today through Saturday the following impacts are possible, especially in the afternoon: low in northern Pinellas, Manatee, and northern Lee Counties; very low in southern Pinellas, southern Sarasota, and Charlotte Counties; patchy moderate in northern Sarasota County. On Sunday the following impacts are possible: patchy moderate in northern Pinellas, Manatee, and northern Lee Counties; low in southern Pinellas, southern Sarasota, and Charlotte Counties; patchy high in northern Sarasota County. Due to the low oxygen water offshore, more dead fish may be found on the beach than normal. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

**Analysis:** The bloom persists offshore from Pasco to Lee Counties. The northern and southern extents of the bloom are hard to pin point due to clouds and non-harmful blooms bordering the HAB. Imagery from 8/16 indicates a chlorophyll concentration of  $>20 \mu\text{g/L}$  11 km (7 miles) west of Palm Harbor at  $28^{\circ}4'N$   $82^{\circ}52'W$ . Imagery from 8/17 indicates a chlorophyll concentration of  $20 \mu\text{g/L}$  19 km (12 miles) west of Bonita Springs at  $26^{\circ}22'N$   $81^{\circ}59'W$ . Samples from 8/15 in Charlotte County contained no *Karenia brevis*, but did contain several other species. Reports of discolored water are possible. A wind transport model indicates movement of up to 10 km south since 8/15. Weak northerly expansion of the bloom is possible through Monday.

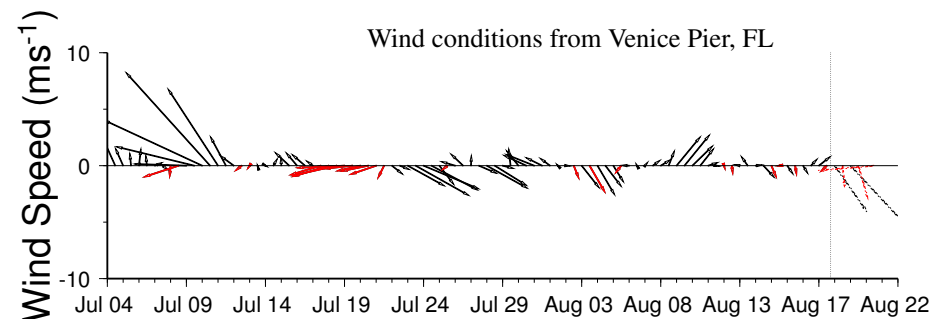
Bronder, Keller

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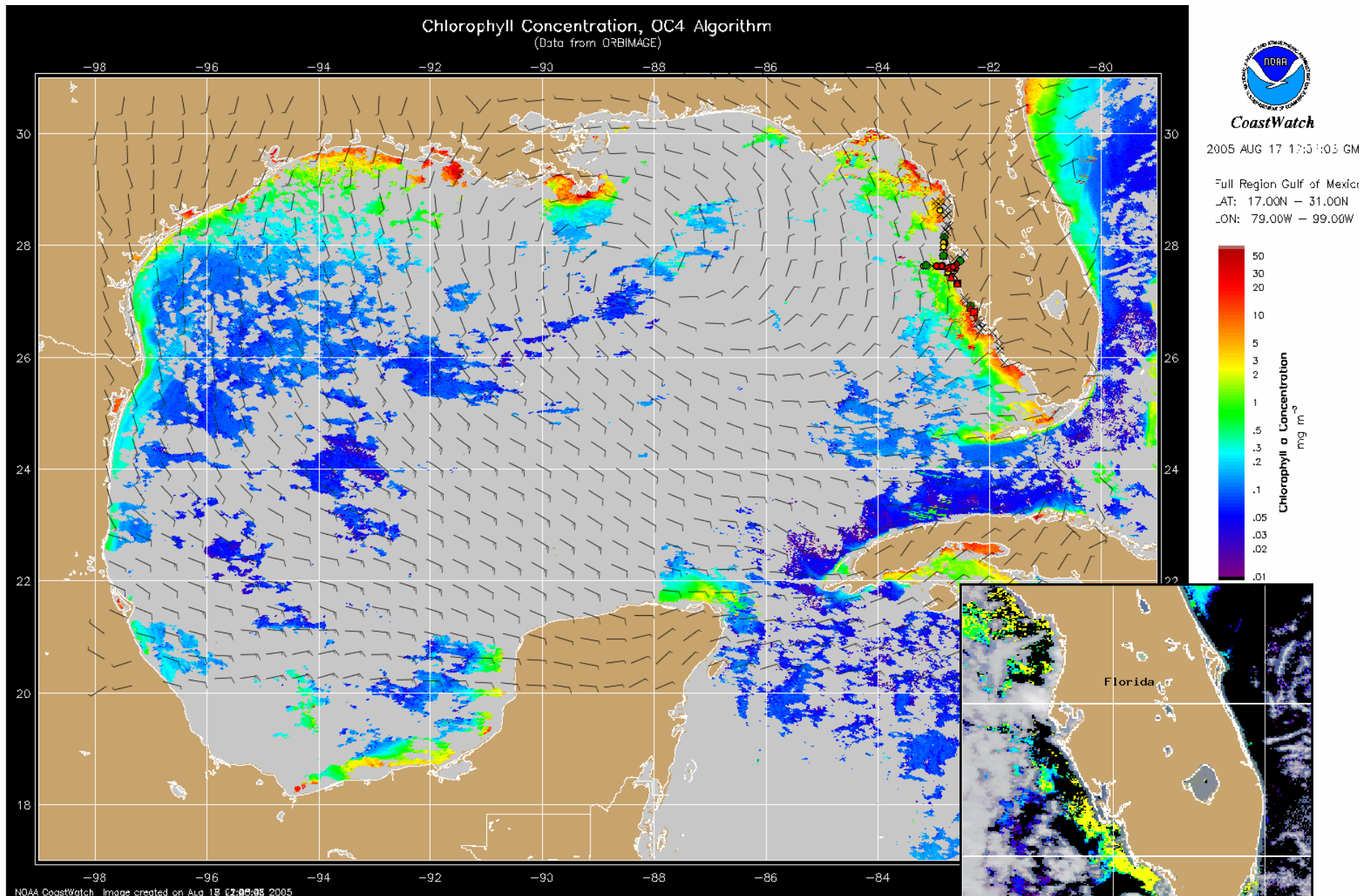


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from August 5, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Winds today through Saturday will be southeast (5 kts, 3 m/s) becoming onshore (10 kts, 5 m/s) in the afternoon. On Sunday winds will be southwest (10 kts, 5 m/s).



Chlorophyll concentration from satellite and forecast winds for August 19, 2005 12Z with cell concentration sampling data from August 5, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)